

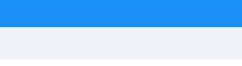
Sign in to Platform



**Review the Alarm** 



**Open Case** 



**Case Follow-up** 

Reading emails



Looking for the

most recents

alarm

notifications

Looking at this alarm frequency in the email box

**4**3



Going to the platform



Typing credentials



Logging In



Looking to know if it is a new alarm or persistent alarm



Looking to what type of alarm/alert



Reviewing if we opened a case already for this alarm.

Helpful



Open case for this alarm (if we didn't opened a case for this alarm already)



Sending email to the Field Office with alarm data.



has been fixed we close the case.

If the Issue

Relieved

**Team Spirit** 

After 7 days, we Contact the Field Office, to know the alarm status.

Questions

**Emotions** 

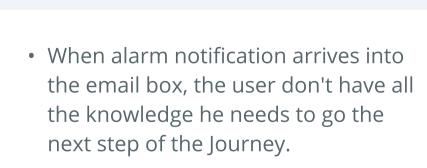
Task list

- What is the alarm code?
- What type of alarm is?
- What is the alarm description?
- What is the alarm frequency?
- What type of credentials should I provide?
- Personal or corporate?
- Is this a new alarm or a persistent alarm?
- Does this alarm has an open case?
- Do I need to open a case for this alarm
- What information should I provide to the Field Office?
- Has the problem been resolved?
- What is the timeframe estimation of the repair?

Concerned Intrigued Overwhelmed



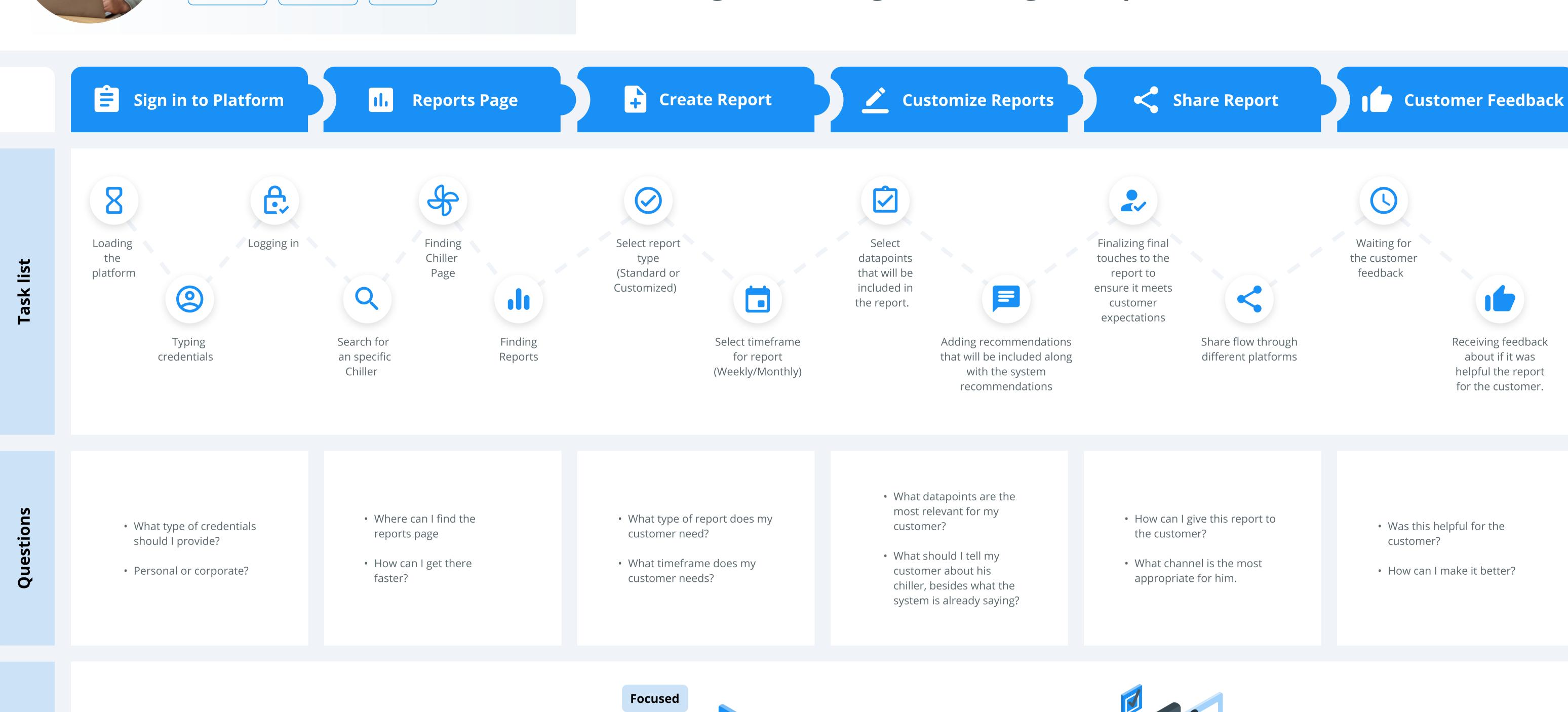




- The user have to dig deeper into the email box sorting and searching alarms to find more relevant data about this alarm, like frequency.
- Threshold alarms should not be ignored by the user, if is not important for him, it might be better to just not report those to his email inbox.
- Reduce the alarm noise, the same alarm is coming to the user inbox every 15min, and it will keep going till the issue is solved, in a process that can take weeks to months to be solved.
- Fast log in, user should spent the shortest time possible here
- Quick access to alarm history
- Better filter for alarms
- Fast access to open case
- The platform should have the ability to filter alarms in a History Page, to segregate the alarms with open cases, the ones that have not been acted on and the fixed alarms.
- Opening a case is being done in another platform, which may disconnect the user from Smart Service
- Give the abiltity to open case at SMART, at some level, maybe not too detail, 'cause there is another platform to manage that, but to at least acknowledge an alarm has been taking care of, and avoid the persistent notification.
- Better tagging system for alarms
- Features for alarm tracking

#### **★** Goal

Reporting to Costumers, the experience of creating, customizing and sending the Report.





- Fast log in, user should spent the shortest time possible here
- Better navigation
- Fast access to reports
- Monthly reports have been indicated as useful, but users are concerned that daily reports do not have much to offer
- Adding weekly report
- Better reporting or automated system for reporting
- Better builder for reports
- Adding ability for standard and customized reports
- Easy to use Report Design, through the builder, where the user can design his own report with minimum effort
- Fast delivery to the customer, shorten download and upload times.
- Feature to gather fast feedback about the value of the report, could be a valoration or rating system.

**Emotions** 

### **Antoine Bernard**

Service Engineer

Detective

Teacher

**★** Goal

#### Support technicians troubleshooting chillers



Sign In to Platform











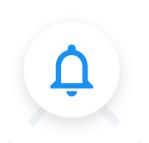
Solutions

# Get a

phone call or email notification



Ask which chiller have the problem



Typing credentials

Reactive



platform





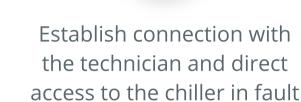
Search the chiller by serial number



Search the chiller by job site name

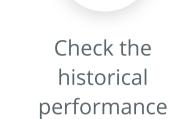










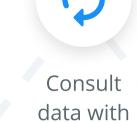




Check

trends

Check if is an internal or external problem



technician

Ask for external status of the chiller



Determinate if the problem can be solve remotely

or on site





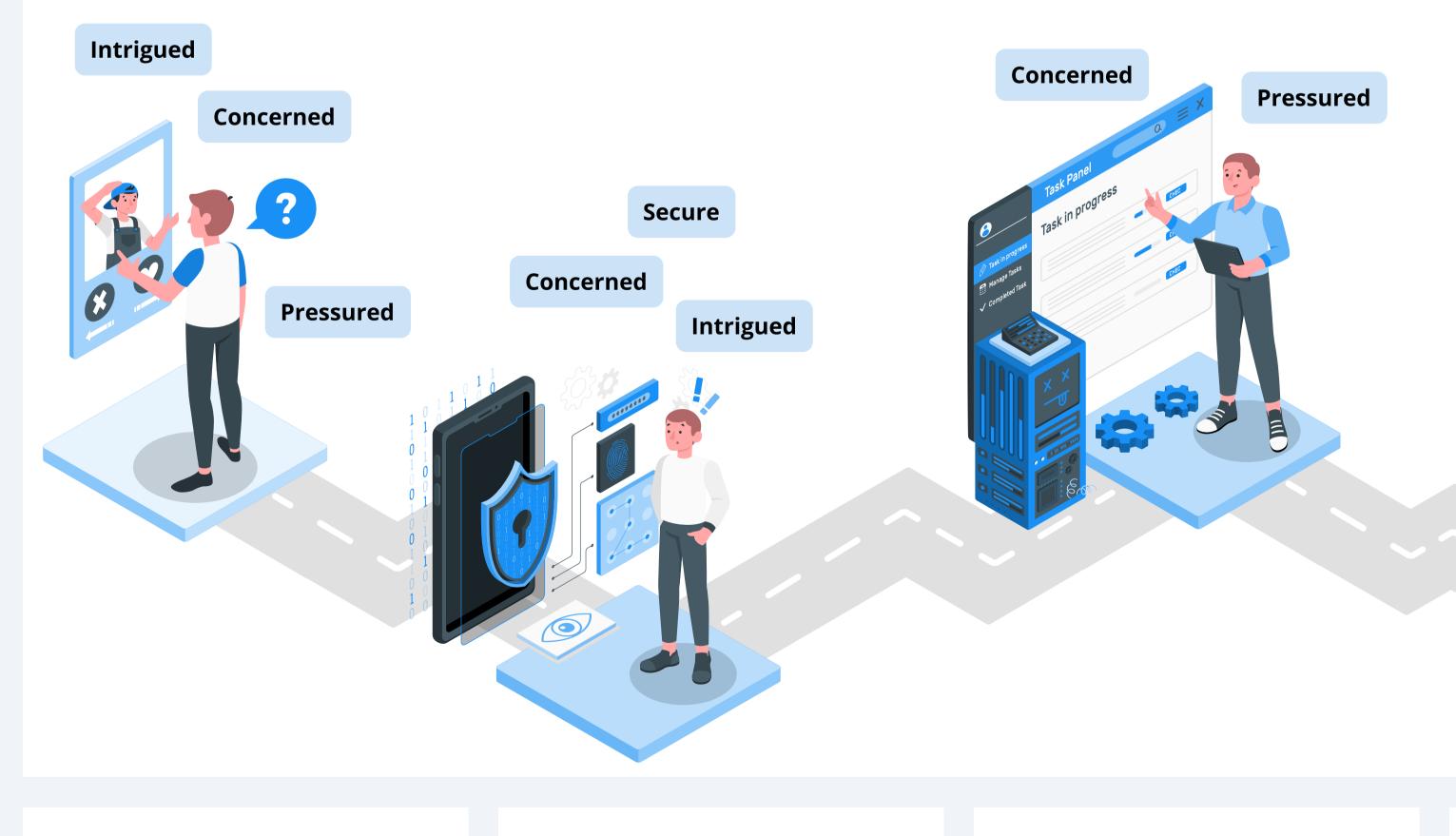


Finishing troubleshooting

# Questions

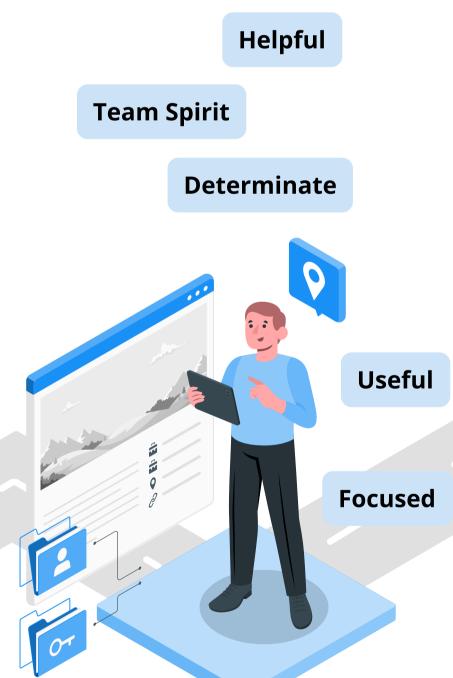
**Emotions** 

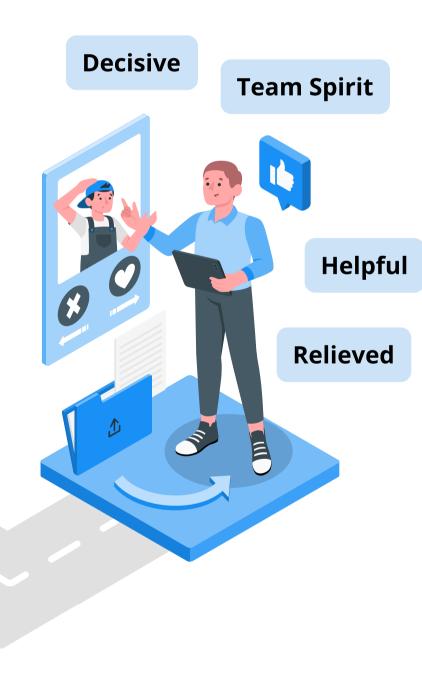
- How many alarms are existing now?
- What's the priority of the alarm?
- What's the information of the chiller?
- What credentials should he use, personal or business?
- How long will it take to the platform to load?
- How will I be able to help?
- What is the serial number of the chiller or does it have another form of identification?
- What is the job site name?
- What is the contract number?
- How can a bot help me?
- Is this information helpful?
- What is the behavior for the past days or month?
- Is there any datapoint pointing to the roof?
- Is all within normal ranges?
- Is the problem source due to internal malfunction?
- Is the problem source due to an external factor of the chiller or the site?
- The problem can be solved from the system?
- The problem can be solved on site?
- What is the most viable solution?









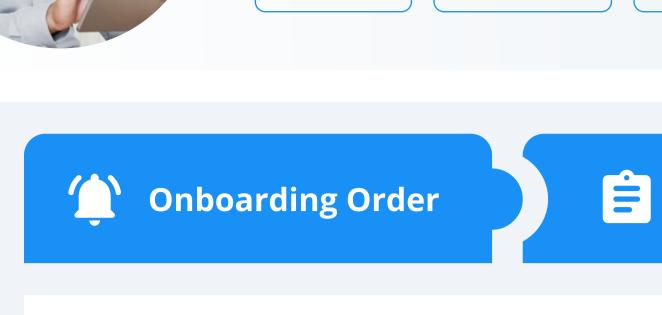


- The system should have a priority filter stage to show what are the most important open alarms
- The email notification should have a direct link to an specific chiller to shorten the response time
- The system should remember the user credentials
- Fast log in, user should spent the shortest time possible here
- The system should show the user the chiller with alarms reports
- As a user he would expect to get to the chiller ASAP
- The ChatBot that is going to be used for diagnostics and troubleshooting can also connect technicians with service engineers or Command Center. This way the process would occur within the platform and not outside of it, it is helpful to bring users to the platform and make them use it.
- The system should give a possible feedback about the existing problem
- Show the user what data they need to check
- The trends should be customized so the user can check the relation between specific data that might not been displayed in the original setting
- The platform could show possible questions or parameters to check if it the problem is outside of the platform
- The user needs the external conditions of the chiller
- The system should collect information about site status
- The system should indicate that the problem has been solved
- The system should save a report about the problem and the solution for future references



#### **★** Goal

#### **Onboard Chillers (Connecting chillers to modems)**



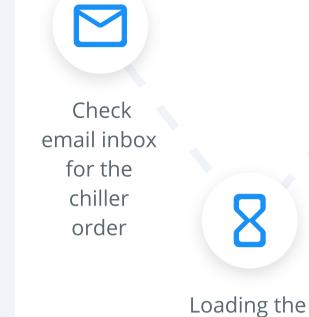


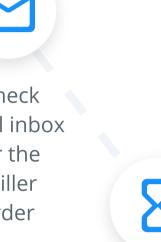






Ask if







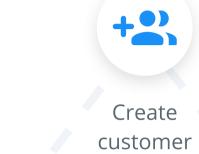
platform

Go to the

6

Sign into

the system



\*

Settings

screen

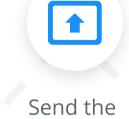
Select the

customer



Search directly the gateway ID

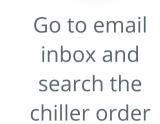
Select gateway



template

to the

modem





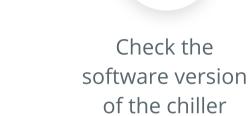
the PDF with the chiller specs

Fill the form with the PDF information



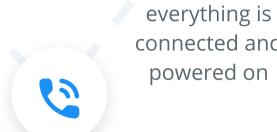
function of the chiller (cooling or heating)

Select the





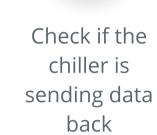
Fill each form with the chiller data points and thresholds parameters





Call the technician on

field



Questions

Task list

Opportunities **Improvements** 

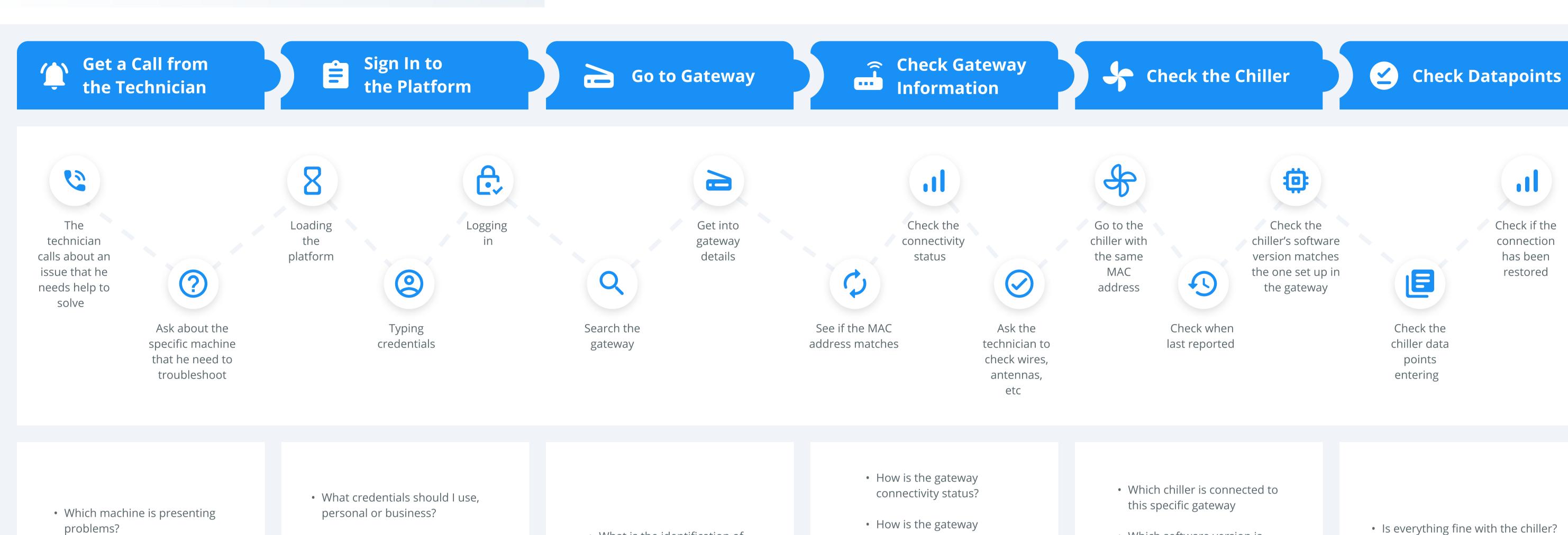
- How many orders are waiting to be set up?
- To what client does the order belongs?
- Is the client already on the data base?
- Do I need to create a new customer account in the system?
- To which Gateway the chiller will connect to?
- What is the model and serial number of the chiller?
- What is the chiller's function?
- What software version does it have?
- What are the data points and thresholds that will be measure on the system?
- Is the technician on site?
- Is the chiller installed and powered on?
- Is the chiller connected to the gateway?
- Is the chiller sending data?

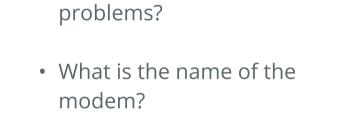


- The user has to check the email to see new orders, this information could come directly from the system
- The user has to download a PDF with the information that he needs for work, why can not the system already have that pre-populated
- The user has to manually search the customer's name in order to find out if there is necessary to create a new customer account
- The system can display the gateway availability for the incoming chillers
- Every datapoint that has to be put into the system is manually done by typing or copying & pasting from the PDF
- The user has to switch between platforms to get the datapoint into the forms
- Every datapoint that has to be put into the system is manually done by typing or copying & pasting from the
- The user has to switch between platforms to get the data into the forms
- There are too many forms and do not have any distinction between each other, or a behavior that guides the user in the process
- The system should be more automated so there is less chance for human error

#### **★** Goal

#### **Troubleshoot Connectivity with Technicians**





 How long will it take to the platform to load?

Multitasking

- How will I be able to help?
- What is the identification of this gateway on the system?
- hardware status?
- How has the gateway behaved in the last days or months?
- Which software version is operating
- Does it matches the one set up on the gateway configurations?
- Is the connection restore?



**Emotions** 

Task list

Questions

- Having to wait for the technician's call to find out that there is a problem
- The system should remember the user credentials, without security risk
- The system could show the user the gateways with alarms reports
- The physical status of the gateway should be somehow collected into the system
- The software version issues should be displayed
- The system could be more intuitive about the problems and possible solutions
- The system should indicate that the problem has been solved
- The system should save a report about the problem and the solution for future references

## Liu Zhang

System Admin

Proactive

Responsible

Multitasking



Onboarding and managing users, assign roles and permissions



**Check User Approvals** 



**Configure Account** Information



**Assign Roles** and Permissions



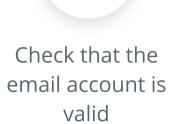
**Confirm Account Creation** 



Check if there are any user pending for approval



company email



How many accounts are waiting

• How many emails are wrong?

for approval?



(If not) Call

them and

ask them

to use a

Wait for right email account



Get into user account settings

• Is the overall data filled correctly?



Configure the account data



Assign roles



Assign permissions



Send confirmation email or notification with account information to the customer

Is the setup for the

account complete?

Expectation

Useful

Task list

Questions

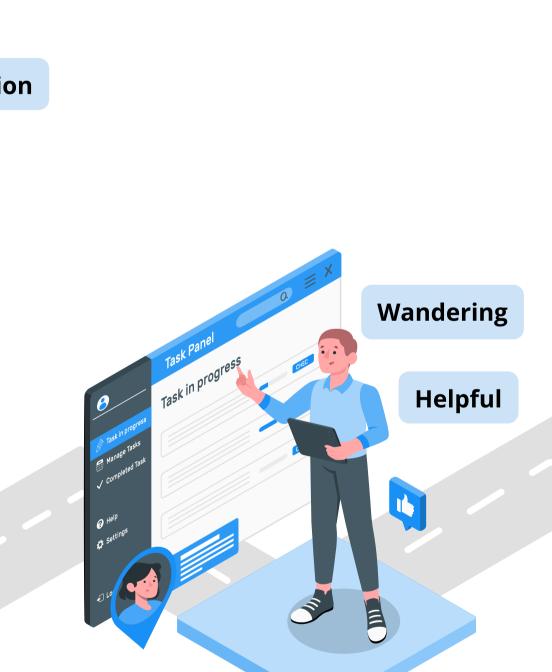
**Emotions** 

Improvements Opportunities

- The system should indicate to the customer the acceptable email directions
- The user shouldn't have to check this data manually
- The system should have the option to fill the information with the data from the mail account used to register the account
- The roles could have some profile settings that suggest a default configuration
- The option for customized configuration should remain as a secondary option
- The system should send an internal message or notification that everything is

correctly done





What is the role of this

• What are the permissions for

account?

this role?

